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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,910	04/05/2004	'Marcus Dill	13906-126001 / 2003P00395	2649
32864	7590	10/31/2006	EXAMINER	
FISH & RICHARDSON, P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022			EBIRIM, EMEKA	
			ART UNIT	PAPER NUMBER
			2166	

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/816,910

Applicant(s)

DILL ET AL.

Examiner

Emeka Ebirim

Art Unit

2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 8/3/06, 2/9/06, 4/5/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Art Unit: 2166

DETAILED ACTION***Claim Status***

1. The application has been examined. Claims 1-21 are rejected as detailed below and are pending in this office action.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claim 1-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

With respect to claims 1-21, especially claims 1, 12 and 21, the method, program and system as recited do not produce a useful and tangible result in view of MPEP 2106 (IV)(B)(2)(b)¹ and 2106 (IV)(B)(2)(b)(ii)². To perform a physical transformation, the

¹ MPEP 2106 (IV)(B)(2)(b):

A claim that requires one or more acts to be performed defines a process. However, not all processes are statutory under 35 U.S.C. 101. *Schrader*, 22 F.3d at 296, 30 USPQ2d at 1460. To be statutory, a claimed computer-related process must either: (A) result in a physical transformation outside the computer for which a practical application in the technological arts is either disclosed in the specification or would have been known to a skilled artisan (discussed in i) below), or (B) be limited to a practical application within the technological arts (discussed in ii) below). See *Diamond v. Diehr*, 450 U.S. at 183-84, 209 USPQ at 6 (quoting *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1877)) ("A [statutory] process is a mode of treatment of certain materials to produce a given result. It is an act, or a series of acts, performed upon the subject-matter to be transformed and reduced to a different state or thing.... The process requires that certain things should be done with certain substances, and in a certain order; but the tools to be used in doing this may be of secondary consequence."). See also *Alappatt*, 33 F.3d at 1543, 31 USPQ2d at 1556-57 (quoting *Diamond v. Diehr*, 450 U.S. at 192, 209 USPQ at 10). See also *id.* at 1569, 31 USPQ2d at 1578-79 (Newman, J., concurring) ("unpatentability of the principle does not defeat patentability of its practical applications") (citing *O'Reilly v. Morse*, 56 U.S. (15 How.) at 114-19). If a physical transformation occurs outside the computer, a disclosure that permits a skilled artisan to practice the claimed invention, i.e., to put it to a practical use, is sufficient. On the other hand, it is necessary for the claimed invention taken as a whole to produce a practical application if there is only a transformation of signals or data inside a computer or if a process merely manipulates concepts or converts one set of numbers into another.

A claimed process is clearly statutory if it results in a physical transformation outside the computer, i.e., falls into one or both of the following specific categories ("safe harbors").

² 2106 (IV)(B)(2)(b)(ii):

Art Unit: 2166

claimed invention must transform an article of physical object into a different state or thing. Transformation of data is not a physical transformation. A useful, and tangible results must be either specifically recited in the claim or flow inherently therefrom. To be useful the claimed invention must establish a specific, substantial, and credible utility. To be tangible the claimed invention must produce a practical application or real world result.

With respect to claims 12-20, "a computer program product tangibly embodied in an information carrier" is recited in the preamble of claim 12. A signal encoded with functional descriptive material does not fall within any of the categories of patentable subject matter. Therefore, claims 12-20 are not statutory (As set forth in § 101, a claimed signal is clearly not a process under § 101 because it is not a series of steps. A claimed signal has no physical structure, does not itself perform any useful, concrete and tangible result, and does not fit within the definition of a machine. A claimed signal is not matter, but a form or energy, and therefore is not a composition of matter or product).

For such subject matter to be statutory, the claimed process must be limited to a practical application of the abstract idea or mathematical algorithm in the technological arts. See *Alappat*, 33 F.3d at 1543, 31 USPQ2d at 1556-57 (quoting *Diamond v. Diehr*, 450 U.S. at 192, 209 USPQ at 10). See also *Alappat* 33 F.3d at 1569, 31 USPQ2d at 1578-79 (Newman, J., concurring) ("unpatentability of the principle does not defeat patentability of its practical applications") (citing *O'Reilly v. Morse*, 56 U.S. (15 How.) at 114-19). A claim is limited to a practical application when the method, as claimed, produces a concrete, tangible and useful result; i.e., the method recites a step or act of producing something that is concrete, tangible and useful. See *AT & T*, 172 F.3d at 1358, 50 USPQ2d at 1452. Likewise, a machine claim is statutory when the machine, as claimed, produces a concrete, tangible and useful result (as in *Srata Street*, 149 F.3d at 1373, 47 USPQ2d at 1601) and/or when a specific machine is being claimed (as in *Alappat*, 33 F.3d at 1544, 31 USPQ2d at 1557 ("en banc)). For example, a computer process that simply calculates a mathematical algorithm that models noise is nonstatutory. However, a claimed process for digitally filtering noise employing the mathematical algorithm is statutory.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-21 rejected under 35 U.S.C. 102(e) as being anticipated by Pub No 2004/0164961 to Bal et al (hereinafter Bal).

Claim 1.

Bal discloses:

A computer-implemented method for performing a data analysis process, the method comprising:

accessing an input identifying a data analysis process [Para 0005];

accessing sub-process indicators, each sub-process indicator identifying a sub-process associated with the data analysis process, wherein [Para 0029]:

at least one identified sub-process is a deployment sub-process for storing a data attribute created in another one of the identified sub-processes [historical database (storing) Para 0029-0030], and

at least one identified sub-process is (1) an extraction sub-process for extracting data from a transactional data source, (2) a transformation sub-process for transforming

Art Unit: 2166

data extracted from the transaction data source from a data format used by the transactional data source to a data format used for analytical processing, (3) a loading sub-process for loading data into an analytical data source that is used for analytical processing, or (4) a data mining sub-process for creating a data attribute by performing an analytical process on data from the analytical processing data source; and performing the sub-processes identified by accessed sub-process indicators [extraction, transformation, loading, analytics, Para 0029, Fig 2, Fig 6-9].

Claim 2.

Bal discloses the elements to claim 1 as above and furthermore it discloses the data source is a transactional data source [Para 0028], and the deployment sub-process stores the created data attribute in the transactional data source [transactional databases stores, Para 0028].

Claim 3.

Bal discloses the elements to claim 2 as above and furthermore it discloses the deployment sub-process stores the created data attribute in one of the data source, a second transactional data store other than the transactional data source, or a second analytical data store used for analytical processing [Para 0034, Fig 2, Fig 6-9].

Claim 4.

Bal discloses the elements to claim 1 as above and furthermore it discloses wherein one of the accessed sub-process indicators is associated with a computer program that causes the indicated sub-process to be performed [executes instructions (program), Para 0023].

Claim 5.

Bal discloses the elements to claim 1 as above and furthermore it discloses accessing meta-data elements to be used in the data analysis process wherein each meta-data element is associated with 1) a corresponding data element in the transactional data source, 2) a corresponding data element in the analytical process data source, or 3) both a corresponding data element in the transactional data source and a corresponding data element in the analytical process data source [pre-defined tables from which data can be accessed, Para 0030, 0041].

Claim 6.

Bal discloses the elements to claim 1 as above and furthermore it discloses each of the identified sub-processes are capable of sending messages that are sent using the same message format [Para 0031].

Claim 7.

Bal discloses the elements to claim 6 as above and furthermore it discloses

having one of the identified sub-processes send a message to another of the identified sub-processes [Para 0033]; and

having the identified sub-process that receives the message perform a process in response to receiving the message [Para 0033].

Claim 8.

Bal discloses the elements to claim 1 as above and furthermore it discloses:

accessing an indication defining how a particular error is to be processed during the data analysis process [Para 0033]; and

when the particular error is detected during the data analysis process, processing the particular error based on the indication defining how the particular error is to be processed [Para 0031].

Claim 9.

Bal discloses the elements to claim 1 as above and furthermore it discloses:

accessing an indication identifying a computing device or a component of a computing device to be used during the execution of one of the identified sub-processes [Para 0024]; and

using the identified computing device or the component of the computing device during the execution of the one of the identified sub-processes based on the accessed indication [Para 0024].

Claim 10.

Bal discloses the elements to claim 1 as above and furthermore it discloses:
accessing an indication identifying an order for performing the identified sub-processes [Para 0029]; and
controlling order of execution of the identified sub-processes such that the order is based on the accessed indication identifying the order for performing the identified sub-processes [Para 0029].

Claim 11.

Bal discloses the elements to claim 1 as above and furthermore it discloses:
accessing an indication identifying when the data analysis process is to be initiated [Para 0029]; and
controlling initiation of the data analysis process such that the initiation is based on the accessed indication [Para 0029].

6. Subject matter of claims 12-21 are rejected in the analysis above in claims 1-11 and these claims are rejected on that basis.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See the accompanying PTO-892 form.

Contact Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emeka Ebirim whose telephone number is 571-272-3994. The examiner can normally be reached on 8:30pm - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-272-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

hp
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Art Unit: 2166


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SUPERVISORY PATENT EXAMINER